



APR 1 9 2016

Ms. Julia Maddox Chow Maddox Farms 3899 W Davis Ave Riverdale, CA 93656

Re: Notice of Minor Title V Permit Modification District Facility # C-6927 Project # C-1152779

Dear Ms. Maddox Chow:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued Authorities to Construct (ATCs) C-6927-33-2 and C-6927-37-1 (under project C-1152525 and project C-1152252, respectively) into the Title V operating permit. Maddox Farms was issued an ATC permit to modify an existing stationary 260 bhp Cummins diesel-fired IC engine powering an agricultural irrigation pump (C-6927-33-2) and an existing stationary 300 bhp Cummins diesel-fired IC engine (C-6927-37-1) to retrofit each with a CARB alternative fuel certified California Clean Air Technologies, LLC (CCAT) dual-fuel conversion system to allow each engine to be fired on a mixture of diesel and propane fuels.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued Authorities to Construct (ATCs) C-6927-33-2 and C-6927-37-1, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

If you have any questions, please contact Mr. Errol Villegas, Permit Services Manager, at (559) 230-5900.

Seyed Sadredin

Executive Director/Air Pollution Control Officer

Northern Region 4800 Enterprise Way Modesto, CA 95356-8718 Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office) 1990 E. Gettysburg Avenue Fresno, CA 93726-0244 Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region 34946 Flyover Court Bakersfield, CA 93308-9725 Tel: 661-392-5500 FAX: 661-392-5585 Ms. Julia Maddox Chow Page 2

Thank you for your cooperation in this matter.

Sincerely,

Arnaud Marjollet Director of Permit Services

**Enclosures** 

Gerardo C. Rios, EPA (w/enclosure) via email CC:

### **TITLE V APPLICATION REVIEW**

Minor Modification Project #: C-1152779

Engineer: Andrea Ogden Date: April 12, 2016

Facility Number: C-6927

Facility Name: Maddox Farms
Mailing Address: 3899 W Davis Ave

Riverdale, CA 93656

Contact Name: Julia Maddox Chow

Phone: (559) 867-3545

Responsible Official: Julia Maddox Chow

Title: General Partner

#### I. PROPOSAL

Maddox Farms is proposing a Title V minor permit modification to incorporate recently issued C-6927-33-2 and C-6927-37-1 (under projects C-1152525 and C-1152252) into the Title V operating permit. Maddox Farms was issued an Authority to Construct (ATC) permit to modify an existing stationary 260 bhp Cummins diesel-fired IC engine powering an agricultural irrigation pump (C-6927-33-2) and an existing stationary 300 bhp Cummins diesel-fired IC engine (C-6927-37-1) to retrofit each with a CARB alternative fuel certified California Clean Air Technologies, LLC (CCAT) dual-fuel conversion system to allow each engine to be fired on a mixture of diesel and propane fuels.

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

#### II. FACILITY LOCATION

The equipment is located at 12863 West Kamm Ave in Riverdale, CA.

#### III. EQUIPMENT DESCRIPTION

C-6927-33-3: 260 BHP CUMMINS MODEL 8.3 DIESEL/PROPANE-FIRED IC ENGINE (S/N 73163852, UNIT 17-3) EQUIPPED WITH A CALIFORNIA CLEAN AIR TECHNOLOGIES, LLC (CCAT) DUAL-FUEL CONVERSION SYSTEM POWERING AN AGRICULTURAL IRRIGATION PUMP

C-6927-37-3: 300 BHP CUMMINS MODEL QSL9 C300 S/N 73080792 DIESEL/PROPANE-FIRED IC ENGINE EQUIPPED WITH A CALIFORNIA CLEAN AIR TECHNOLOGIES, LLC (CCAT) DUAL-FUEL CONVERSION SYSTEM POWERING AN AGRICULTURAL IRRIGATION PUMP

#### IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

### V. APPLICABLE REQUIREMENTS

District Rule 2520, <u>Federally Mandated Operating Permits</u> (Adopted June 21, 2001)

### VI. DESCRIPTION OF PROPOSED MODIFICATIONS

Maddox Farms is proposing to modify an existing stationary 260 bhp Cummins diesel-fired IC engine powering an agricultural irrigation pump (C-6927-33-2) and an existing stationary 300 bhp Cummins diesel-fired IC engine powering an agricultural irrigation pump (C-6927-37-1) to retrofit each with a CARB alternative fuel certified California Clean Air Technologies, LLC (CCAT) dual-fuel conversion system to allow each engine to be fired on a mixture of diesel and propane fuels.

Both of the permit units modified were identical in function, as such, the previous Title V operating permits are nearly identical. The modifications made to these units were identical in nature, so the modifications to the operating permits were nearly identical. The description of the modifications to the permit conditions will will be listed under the specific permit units below:

#### C-6927-33-3:

Permit condition 1 on the current Permit to Operate was replaced by condition 7 from Authority to Construct (ATC) C-6927-33-2 and is included as condition 1 on the proposed Permit to Operate.

Permit conditions 2 and 3 were included on the ATC as conditions 9 and 10 and are included on the proposed Permit to Operate as conditions 3 and 4.

Permit condition 4 on the current Permit to Operate was replaced by condition 11 from Authority to Construct (ATC) C-6927-33-2 and is included as condition 5 on the proposed Permit to Operate.

Permit condition 5 on the current Permit to Operate was replaced by condition 8 from Authority to Construct (ATC) C-6927-33-2 and is included as condition 2 on the proposed Permit to Operate.

Permit conditions 6, 7, and 8 were included on the ATC as conditions 12, 15, and 16 and are included on the proposed Permit to Operate as conditions 6, 9, and 10.

Permit condition 9 was removed from the current Permit to Operate. This condition requires the operator to record the total time the engine operates in hours per calendar year. This requirement is included in condition 16 from Authority to Construct (ATC) C-6927-33-2 and is included as condition 10 on the proposed Permit to Operate.

Permit condition 10 on the current Permit to Operate was replaced by condition 18 from Authority to Construct (ATC) C-6927-33-2 and is included as condition 12 on the proposed Permit to Operate.

ATC condition 1 has been satisified with this project and is no longer appliciable, therefore this condition was not included on the proposed Permit to Operate.

ATC conditions 2, through 6 are included as conditions on the facility-wide operating requirements and therefore were not included on the proposed Permit to Operate.

ATC conditions 13, 14, and 17 are included on the proposed Permit to Operate as conditions 7, 8, and 11.

#### C-6927-37-3:

Permit condition 1 on the current Permit to Operate was replaced by condition 8 from Authority to Construct (ATC) C-6927-37-1 and is included as condition 1 on the proposed Permit to Operate.

Permit conditions 2 through 11 were included on the ATC as conditions 9 through 14, 17 through 19 and 21 these conditions are included on the proposed Permit to Operate as conditions 2 through 7, 10 through 12, and 14.

ATC conditions 1 and 2 have been satisified with this project and are no longer appliciable, therefore these conditions were not included on the proposed Permit to Operate.

ATC conditions 3 through 7 are included as conditions on the facility-wide operating requirements and therefore were not included on the proposed Permit to Operate.

ATC conditions 15, 16, and 20 are included on the proposed Permit to Operate as conditions 8, 9, and 13.

#### VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

- 1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
- 2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
- Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
- 4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include;
  - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
  - An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
- Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
- 6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including;

- 1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- 2. The source's suggested draft permit; and
- 3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

#### VIII. ATTACHMENTS

- A. Proposed Modified Title V Operating Permit
- B. Authorities to Construct
- C. Emissions Increases
- D. Application
- E. Previous Title V Operating Permit

# **ATTACHMENT A**

Proposed Modified Title V Operating Permits

## San Joaquin Valley Air Pollution Control District

**PERMIT UNIT: C-6927-33-3** 

#### **EQUIPMENT DESCRIPTION:**

260 BHP CUMMINS MODEL 8.3 DIESEL/PROPANE-FIRED IC ENGINE (S/N 73163852, UNIT 17-3/ EQUIPPED WITH A CALIFORNIA CLEAN AIR TECHNOLOGIES, LLC (CCAT) DUAL-FUEL CONVERSION SYSTEM POWERING AN AGRICULTURAL IRRIGATION PUMP

### PERMIT UNIT REQUIREMENTS

- This IC engine shall only be used for the growing and harvesting of crops or the raising of fowl or animals for the primary purpose of making a profit, providing a livelihood, or conducting agricultural research or instruction by an educational institution. [District Rules 4701 and 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
- This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed any of the following limits: 2.83 g-NOx/bhp-hr, 1.30 g-CO/bhp-hr, or 0.15 g-VOC/bhp-hr. [District Rules 2201 and 4702, and 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed 0.11 g-PM10/bhp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, and 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- This engine shall be fired on CARB certified diesel fuel containing not more than 0.0015% sulfur by weight; or a combination of CARB certified diesel and LPG/propane. [District Rules 2201 and 4801, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- The permittee shall monitor and record the stack concentration of NOx and O2 at least once every 24 months using a portable analyzer that meets District specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
- All monitoring emission readings shall be taken with the unit operating at conditions representative of normal operations. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 2201] Federally Enforceable Through Title V Permit
- During periods of operation, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Location: 12863 W KAMM AVE, RIVERDALE, CA 93656-9735 C-6927-33-3: Apr 12 2016 1:56PM -- OGDENA

Facility Name: MADDOX FARMS

- 10. The owner/operator shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, quantity of each fuel used and resulting fuel mixture ratio, maintenance or modifications performed, monitoring data, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 11. The permittee shall maintain records of: (1) the date and time of NOx and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

## San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-6927-37-3

#### **EQUIPMENT DESCRIPTION:**

300 BHP CUMMINS MODEL QSL9 C300 S/N 73080792 DIESEL/PROPANE-FIRED IC ENGINE LOUIPPE CALIFORNIA CLEAN AIR TECHNOLOGIES, LLC (CCAT) DUAL-FUEL CONVERSION SYSTEM POWERING AN AGRICULTURAL IRRIGATION PUMP

### PERMIT UNIT REQUIREMENTS

- This IC engine shall only be used for the growing and harvesting of crops or the raising of fowl or animals for the primary purpose of making a profit, providing a livelihood, or conducting agricultural research or instruction by an educational institution. [District Rules 4701 and 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
- This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- Operation of this engine shall not exceed 5,000 hours per year. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed any of the following limits: 2.75 g-NOx/bhp-hr, 2.6 g-CO/bhp-hr, or 0.15 g-VOC/bhp-hr. [District Rules 2201 and 4702, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed 0.15 g-PM10/bhp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- This engine shall be fired on CARB certified diesel fuel containing not more than 0.0015% sulfur by weight; or a combination of CARB certified diesel and LPG/propane. [District Rules 2201 and 4801, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- The permittee shall monitor and record the stack concentration of NOx and O2 within 7 days of initial startup and at least once every 24 months thereafter using a portable analyzer that meets District specifications. [District Rule 2201] Federally Enforceable Through Title V Permit
- All monitoring emission readings shall be taken with the unit operating at conditions representative of normal operations. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS PONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: MADDOX FARMS

12863 W KAMM AVE, RIVERDALE, CA 93656-9735

C-6927-37-3 : Apr 12 2016 12:00PM - OGDENA

- 10. During periods of operation, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
- 11. The owner/operator shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, quantity of each fuel used and resulting fuel mixture ratio, maintenance or modifications performed, monitoring data, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 12. The permittee shall record the total time the engine operates, in hours per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The permittee shall maintain records of: (1) the date and time of NOx and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: MADDOX FARMS Location: 12863 W KAMM AVE,RIVERDALE, CA 93656. C-6927-37-31-Apr 12 2016 12:00PM - OGDENA

# **ATTACHMENT B**

**Authorities to Construct** 





# **AUTHORITY TO CONSTRUCT**

PERMIT NO: C-6927-33-2

**ISSUANCE DATE: 03/11/2016** 

LEGAL OWNER OR OPERATOR: MADDOX FARMS MAILING ADDRESS:

3899 W DAVIS AVE

RIVERDALE, CA 93656-9735

LOCATION:

12863 W KAMM AVE

RIVERDALE, CA 93656-9735

#### **EQUIPMENT DESCRIPTION:**

MODIFICATION OF 260 BHP CUMMINS MODEL 8.3 TIER 3 CERTIFIED DIESEL-FIRED IC ENGINE (S/N 73163852, UNIT 17-3) POWERING AN AGRICULTURAL IRRIGATION PUMP: INSTALL A CARB ALTERNATIVE FUEL CERTIFIED CALIFORNIA CLEAN AIR TECHNOLOGIES, LLC (CCAT) DUAL-FUEL CONVERSION SYSTEM TO ALLOW THE UNIT TO BE FIRED ON A MIXTURE OF DIESEL AND PROPANE FUELS

#### CONDITIONS

- The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
- Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 1070]
- 3. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 1070]
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 5. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 7. This IC engine shall only be used for the growing and harvesting of crops or the raising of fowl or animals for the primary purpose of making a profit, providing a livelihood, or conducting agricultural research or instruction by an educational institution. [District Rules 4701 and 4702, and 17 CCR 93115]

#### CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

- 8. This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rule 4702 and 17 CCR 93115]
- 9. Emissions from this IC engine shall not exceed any of the following limits: 2.83 g-NOx/bhp-hr, 1.30 g-CO/bhp-hr, or 0.15 g-VOC/bhp-hr. [District Rules 2201 and 4702, and 17 CCR 93115, and 40 CFR Part 60 Subpart IIII]
- Emissions from this IC engine shall not exceed 0.11 g-PM10/bhp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, and 17 CCR 93115, and 40 CFR Part 60 Subpart IIII]
- 11. This engine shall be fired on CARB certified diesel fuel containing not more than 0.0015% sulfur by weight; or a combination of CARB certified diesel and LPG/propane. [District Rules 2201 and 4801, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII]
- 12. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR Part 60 Subpart IIII]
- 13. The permittee shall monitor and record the stack concentration of NOx and O2 within 7 days of initial startup and at least once every 24 months thereafter using a portable analyzer that meets District specifications. [District Rule 2201]
- 14. All monitoring emission readings shall be taken with the unit operating at conditions representative of normal operations. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 2201]
- 15. During periods of operation, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]
- 16. The owner/operator shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, quantity of each fuel used and resulting fuel mixture ratio, maintenance or modifications performed, monitoring data, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702]
- 17. The permittee shall maintain records of: (1) the date and time of NOx and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 2201]
- 18. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 2201 and 4702]





## **AUTHORITY TO CONSTRUCT**

**PERMIT NO: C-6927-37-1** 

**ISSUANCE DATE: 03/11/2016** 

LEGAL OWNER OR OPERATOR: MADDOX FARMS **MAILING ADDRESS:** 

3899 W DAVIS AVE

RIVERDALE, CA 93656-9735

LOCATION:

12863 W KAMM AVE

RIVERDALE, CA 93656-9735

#### **EQUIPMENT DESCRIPTION:**

MODIFICATION OF 300 BHP CUMMINS MODEL QSL9 C300 S/N 73080792 TIER 3 CERTIFIED DIESEL-FIRED IC ENGINE POWERING AN AGRICULTURAL IRRIGATION PUMP: INSTALL A CARB ALTERNATIVE FUEL CERTIFIED CALIFORNIA CLEAN AIR TECHNOLOGIES, LLC (CCAT) DUAL-FUEL CONVERSION SYSTEM TO ALLOW THE UNIT TO BE FIRED ON A MIXTURE OF DIESEL AND PROPANE FUELS

### **CONDITIONS**

- Authority to Construct (ATC) C-6927-37-0 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this Authority to Construct. [District Rule 2201]
- The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures 2. of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
- Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 1070]
- Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 1070]
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

#### CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

- 8. This IC engine shall only be used for the growing and harvesting of crops or the raising of fowl or animals for the primary purpose of making a profit, providing a livelihood, or conducting agricultural research or instruction by an educational institution. [District Rules 4701 and 4702, and 17 CCR 93115]
- 9. This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rule 4702 and 17 CCR 93115]
- 10. Operation of this engine shall not exceed 5,000 hours per year. [District Rules 2201 and 4102]
- 11. Emissions from this IC engine shall not exceed any of the following limits: 2.75 g-NOx/bhp-hr, 2.6 g-CO/bhp-hr, or 0.15 g-VOC/bhp-hr. [District Rules 2201 and 4702, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII]
- 12. Emissions from this IC engine shall not exceed 0.15 g-PM10/bhp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII]
- 13. This engine shall be fired on CARB certified diesel fuel containing not more than 0.0015% sulfur by weight; or a combination of CARB certified diesel and LPG/propane. [District Rules 2201 and 4801, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII]
- 14. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR Part 60 Subpart IIII]
- 15. The permittee shall monitor and record the stack concentration of NOx and O2 within 7 days of initial startup and at least once every 24 months thereafter using a portable analyzer that meets District specifications. [District Rule 2201]
- 16. All monitoring emission readings shall be taken with the unit operating at conditions representative of normal operations. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 2201]
- 17. During periods of operation, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]
- 18. The owner/operator shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, quantity of each fuel used and resulting fuel mixture ratio, maintenance or modifications performed, monitoring data, and any other information necessary to demonstrate compliance. [District Rules 2201 and 4702]
- 19. The permittee shall record the total time the engine operates, in hours per calendar year. [District Rule 2201]
- 20. The permittee shall maintain records of: (1) the date and time of NOx and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 2201]
- 21. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 2201 and 4702]

# ATTACHMENT C

**Emissions Increases** 

		SSIPE (lb/yr)					
	NO <sub>x</sub>	VOC	СО	SO <sub>x</sub>	PM <sub>10</sub>		
C-6927-33-2	0	0	0	28	0		
C-6927-37-2	0	0	0	19	0		
TOTAL	0	0	0	47	0		

# ATTACHMENT D

Application



# San Joaquin Valley Air Pollution Control District 1 5 2

www.valleyair.org

**Permits Services SJVAPCD** 

RECEIVED

# Permit Application For:

[ ] ADMINISTRATIVE AMENDM	ENT [X] MINOR MODIFICATION	[ ] SIGNIFICANT MODIFICATION
1. PERMIT TO BE ISSUED TO: MAI	DDOX FARMS	
2. MAILING ADDRESS:		
STREET/P.O. BOX: 3899 W. DAVIS AVENUE		
CITY: RIVERDALE	STATE: <u>CA</u>	9-DIGIT  ZIP CODE: 93656
3. LOCATION WHERE THE EQUIPMEN	INSTALLATION DATE:	
STREET: KAMM AVENUE BETWEEN JAME	SON AND SLOUGH CITY: RIVERDALE	
	NSHIP RANGE	
4. GENERAL NATURE OF BUSINESS: FA	ARMING	•
IMPLEMENT C-6927-33-2 Modificat	tion of engine with CCAT Dual-Fuel retrofit syste	om - CLAT DURE-FULL retrotit syst
6. TYPE OR PRINT NAME OF APPLICANT: JULIA MADDOX CHOW		TITLE OF APPLICANT: CFO
7. SIGNATURE OF APPLICANT:	PHONE: (559)867-3545  FAX: (559)867-4729  EMAIL: jmaddoxchow@earthlink.net	
For APCD Use Only:		
DATE STAMP	FILING FEE RECEIVED: \$	CHECK#:
	DATE PAID: PROJECT NO: C-1/5277	9 FACILITY ID: C-6927
	FROJECTIVO: CIJOT	FACILITY ID:



# San Joaquin Valley Unified Air Pollution Control District



# TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I.	TYPE OF PERMIT ACTION (Check appropriate box)
[ ] [X]	SIGNIFICANT PERMIT MODIFICATION [ ] ADMINISTRATIVE MINOR PERMIT MODIFICATION AMENDMENT
1.	OMPANY NAME: FACILITY ID: C - CAY  Type of Organization: [] Corporation [] Sole Ownership [] Government [] Partnership [] Utility  Owner's Name:
3.	Agent to the Owner: Julia Maray Char Grave Partner
II.	COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):  Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).  Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permitterm, on a timely basis  Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.  Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.
I de	cclare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and tne:
Zig	mature of Responsible Official Date
	Turiamates Charame of Responsible Official (please print)  Commend Rother  le of Responsible Official (please print)

# ATTACHMENT E

Previous Title V Operating Permits

## San Joaquin Valley Air Pollution Control District

**PERMIT UNIT: C-6927-33-1** 

**EXPIRATION DATE: 12/31/2018** 

#### **EQUIPMENT DESCRIPTION:**

260 BHP CUMMINS MODEL 8.3 TIER 3 DIESEL-FIRED IC ENGINE (S/N 73163852, UNIT 17-3) POWERING AN AGRICULTURAL IRRIGATION PUMP

## PERMIT UNIT REQUIREMENTS

- 1. This IC engine shall only be used for the growing of crops or raising of fowl or animals. [District Rule 4701] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed any of the following limits: 2.83 g-NOx/bhp-hr, 1.30 g-CO/bhp-hr, or 0.15 g-VOC/bhp-hr. [District Rule 2201 and 4702, and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed 0.11 g-PM10/bhp-hr based on US EPA certification using ISO 8178 test procedure. [District Rule 2201 and 4102, and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- This engine shall be equipped with an operational nonresettable elapsed time meter with a minimum display capability of 9,999 hours. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- During periods of operation, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
- The owner/operator shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
- The permittee shall record the total time the engine operates, in hours per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: MADDOX FARMS

Location: 12863 W KAMM AVE, RIVERDALE, CA 93656-9735 C-6927-33-1: Mar 24 2016 7:52AM - OGDENA

## San Joaquin Valley Air Pollution Control District

**PERMIT UNIT: C-6927-37-4** 

#### **EQUIPMENT DESCRIPTION:**

300 BHP CUMMINS MODEL QSL9 C300 S/N 73080792 TIER 3 CERTIFIED DIESEL-FIRED IC ENGINE POWERING AN AGRICULTURAL PUMP

## PERMIT UNIT REQUIREMENTS

- 1. This IC engine shall only be used for the growing of crops or raising of fowl or animals. [District Rule 4701] Federally Enforceable Through Title V Permit
- 2. This engine shall be equipped with an operational nonresettable elapsed time meter with a minimum display capability of 9,999 hours. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- Operation of this engine shall not exceed 5,000 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed any of the following limits: 2.75 g-NOx/bhp-hr, 2.6 g-CO/bhp-hr, or 0.15 g-VOC/bhp-hr. [District Rules 2201 and 4702; and 17 CCR 93115] Federally Enforceable Through Title V Permit
- Emissions from this IC engine shall not exceed 0.15 g-PM10/bhp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102; 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
- During periods of operation, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
- The owner/operator shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
- 10. The permittee shall record the total time the engine operates, in hours per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702] Federally Enforceable Through Title V Permit

These terms and conditions Facility-wide Permit to Operate.

Facility Name: MADDOX FARMS Location:

ocation: 12863 W KAMM AVE, RIVERDALE, CA 93656-9735 6927-37-4: Apr 12 2016 11:56AM – OGDENA